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United States Department of Agriculture
Bureau of Biological Survey
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RABBIT MEAT AS A SOURCE OF PROTEIN

Recent tests made in the United States Department of Agriculture show that rabbit meat compares favorably with other meats as a source of protein. In making the tests, department workers analyzed the flesh of four typical specimens of domestic rabbits, which included representatives of the Chinchilla, American White, and New Zealand breeds. The rabbits varied in age from 10 weeks to 18 months. The meat was stripped from the bones of the carcass, and the heart, liver, and kidneys were removed.

The moisture and protein content of the specimens were relatively high, averaging 66 per cent and 20 per cent, respectively; whereas the fat content was rather low, being slightly less than 12 per cent. The fuel value per pound was 1,011 calories in one experiment and 716 calories in another, with an average of 855 calories for all. The proportion of dressed weight to live weight was 51 per cent, somewhat less than that of larger meat animals.

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COMPOSITION OF RABBIT MEAT*

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Domestic rabbits have long been raised for home use and the market in several countries of Europe. In recent years the practice of raising them for food purposes in the United States has increased materially and has developed into an industry of some importance.

As a result, the Department of Agriculture receives frequent inquiries concerning the composition and food value of rabbit meat. Analyses found in the literature are not altogether satisfactory. With one exception, all the published analyses that have been found are from foreign sources, and most of them are old. Descriptions are incomplete and leave room for doubt as to the applicability of the analyses to domestic rabbits raised in the United States. The analysis by Holmes and Deul was made on American animals, but in it the total ash is higher than usual in edible flesh.

To meet the evident need for more exact information, the Bureau of Biological Survey requested that an examination of the flesh of domestic rabbits be undertaken by the Bureau of Animal Industry and furnished, for the purpose, four normal, healthy animals, selected as typical meat rabbits. They are described below:

Description of Rabbits

Laboratory No.	Breed	Age	Sex
208	American White	1½ years	Female
414	American White	10 months	Female
587	Chinchilla	10 weeks	Male
555	New Zealand	13 weeks	Male

The four rabbits were slaughtered and dressed in the regular way. The dressed weight reported does not include the heart, liver, and kidneys. These organs were removed and weighed separately. The meat was then carefully stripped from the bones and the meat and bones weighed separately. Table 1 shows live weight, dressed weight, edible portion, and waste.

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Table 1

Weights of live rabbits, dressed carcasses, and parts

Laboratory Animal	Live Animal		Dressed Carcass		Meat		Heart, Liver, and Kidneys	Bones, Sinews, and Like Waste
	lbs.	oz.	lbs.	oz.	lbs.	oz.	oz.	oz.
208	7	6½	3	12¾	2	15½	5-3/16	10-1/16
414	7	12¾	3	15¾	3	3-5/8	5-13/16	9-7/8
587	4	3½	2	2½	1	12½	3-5/8	6
555	5	6½	2	11¾	2	2¼	4½	8

The meat was prepared for analysis in accordance with the official method of the Association of Official Agricultural Chemists. The heart, liver, and kidneys were not included with the meat in preparation. These organs are left out because the composition of them is fairly uniform for all animals, and an analysis based on the meat only would be more informative than the analysis of a sample in which these organs were included. The determinations of water, protein, fat, and ash were made in accordance with the official method of the Association of Official Agricultural Chemists. Two sets of determinations were made in each case, but in no instance was the difference between the two as great as 0.5 of 1 per cent. The average results are shown in table 2.

Table 2

Chemical composition of edible portion of rabbits

Rabbit No.	Water	Protein (N x 6.25)	Fat (Ether Extract)	Ash	Fuel value per pound
	per cent	per cent	per cent	per cent	calories
208	67.0	21.03	11.30	1.07	842
414	63.08	20.38	15.71	1.02	1,011
587	70.40	20.48	8.46	1.07	716
555	67.15	19.70	12.10	1.07	851

Summary. Four typical, healthy, domestic rabbits were slaughtered, dressed, and the edible portion separated quantitatively from bones and waste. The meat was analyzed by standard methods and its composition determined.

The composition of rabbit meat appears similar to that of poultry, the content of moisture and protein being relatively high and that of fat rather low.